

WELCOME TO DOE'S *RCRA ORIENTATION FOR FACILITY MANAGERS* COURSEWARE

Background This module comprises one component of courseware materials that were developed by DOE's Office of Environmental Policy and Assistance, RCRA/CERCLA Division, EH-413, in response to a request from the Deputy Assistant Secretary for Nuclear and Facility Safety (EH-3). The original course was titled *RCRA Orientation for Nuclear and Facility Safety* and was presented on March 5, 1997, at Germantown, MD. Presentation materials were derived from the more formal three-day course titled DOE's *RCRA Orientation Workshop*, which was developed by EH-413 under a joint funding venture that included the Savannah River Site and the Albuquerque Operations Office.

Courseware Content Although derived from the three-day workshop, DOE's *RCRA Orientation for Nuclear and Facility Safety* (now titled *RCRA Orientation for Facility Managers*) was expanded by developing two new modules to meet the needs of Nuclear Safety Managers. One of the new modules (*Corrective Action*) compares and contrasts RCRA closure and corrective action with CERCLA remedial action by using Oak Ridge Reservation as an example of a radioactively contaminated site closed under RCRA, but undergoing remediation under CERCLA. The other module (*Emerging Issues*) offered a snapshot of the emerging regulations that were expected to impact the Department most dramatically. The remaining courseware modules include:

- Introduction to RCRA and Liability Overview,
- Overview of Solid Waste Determination,
- Overview of Hazardous Waste Determination, and
- Permitting.

PDF "Handout" files only, which contain the aforementioned modules, are designed to serve as stand-alone resources and are equipped with: (1) A list of module contents, (2) Module-specific enabling objectives; (3) Self-assessment questions and answers; (4) A module-specific regulatory citation/key word index; and (5) A module-specific cross-link table that identifies hypertext links to additional Internet resources for hazardous waste-related information.

Using the Courseware Materials Within the PDF Handout modules, users are encouraged to examine the module's Regulatory-Statutory Citation/Key Word Index to identify the availability and location of topics of interest. In contrast, users can simply "dig-in" and sequentially examine the courseware's content. For less extensive reviews or to download additional course presentation materials as needed, users can return to the [RCRA Orientation for Facility Managers Home Page](#) to access electronic files containing the remaining PDF Handout and/or Vugraph files.

To assist users in accessing additional Internet resources, where possible, module-specific hypertext links have been inserted into select points within each of the six PDF Handout courseware modules. Hypertext links appear in both the slide and notes portions as either *blue italicized text* (the first time a link to a particular resource is offered in a given module) or *green italicized text* (each subsequent link to that same resource) and have been assigned to terms and phases for which additional Internet resources such as other EH-413 guidance documents, other Internet Websites, etc. are available. Upon identifying a highlighted term or phase of interest, users generally can access the additional Internet resources by clicking on the highlighted text, which will then hypertext link to another Internet resource. Additional information for obtaining those resources that are not Internet-accessible as well as the objectives, content and organization, use, list of acronyms, Internet resources, and master index is presented in the [*Front-End Materials section*](#) (first section).

**Feedback
And
Contacts**

If you have difficulty in downloading or reviewing modules comprising DOE's *RCRA Orientation for Facility Managers*, [contact our Webmaster](#) and please [provide us with feedback](#). If you are interested in attending the three-day *RCRA Orientation Workshop*, please contact the [National Environmental Training Office](#). Additional questions concerning this courseware or the information presented therein may be directed to Atam Sikri of my staff by:

- Calling at (202) 586-1879,
- Faxing messages to (202) 586-0955, or
- Communicating electronically, via Internet, to atam.sikri@eh.doe.gov.



Emerging Issues

First Issue of Interest to DOE

- Redefinition of solid waste
- EPA's Subpart S Initiative
 - legislative initiatives
 - regulatory initiatives
- Other regulatory developments
 - HWIR-waste rule
 - revised standards for hazardous waste combustors

Definition of Solid Waste: Historical Perspective

- First issued current definition in the January 4, 1985 FR (50 FR 614)
- Prior litigation
- Definition of Solid Waste Task Force goals:
 - eliminate disincentives
 - eliminate regulatory loopholes for recycling
 - simplify the definition of solid waste
- *Reengineering RCRA for Recycling*

Recent Efforts to Redefine “Solid Waste”

- Task Force principal recommendation
- Hazardous waste recycling public meeting
 - allowed EPA an opportunity to present and explain the draft rulemaking
 - facilitated stakeholder input
- Options for Redefining RCRA Jurisdiction
 - Transfer-Based option
 - In-Commerce option

Requirements that Constitute a Major Component of Options

- Transfer-Based option
 - definition of recycling
 - use/reuse and reclamation
 - conditions for exclusion
 - commodity-like and other exclusions
 - streamlined permitting for recycling
- Transfer-Based option and In-Commerce option have similar requirements
- Proposed rule expected in Spring 1997

Second Issue of Interest: EPA's Subpart S Initiative

- Published May 1, 1996 (61 FR 19432)
- Introduces EPA's strategy for promulgating Subpart S
- Provides context for corrective action revisions
- Emphasizes flexibility in current program

Legislative/Administrative Initiatives Affecting Corrective Action

- Land Disposal Program Flexibility Act of 1996
- Superfund reauthorization
- Superfund reform initiatives

Regulatory Initiatives Affecting Corrective Action: Post-Closure Proposal

- Proposed November 8, 1994 (59 FR 55778)
- Will allow the use of other Federal and State authorities as alternatives to *post-closure care permits*
- Would not otherwise modify the applicable cleanup requirements governing regulated units
- Will impact State corrective action enforcement authority

Regulatory Initiatives Affecting Corrective Action: *HWIR-Media Rule*

- Proposed April 29, 1996 (61 FR 18780)
- Affects contaminated media (e.g., soil, surface water, ground water, sediment) generated during cleanup
- Intended to provide flexibility to tailor requirements for managing contaminated media
- Uses a Bright Line to exempt some media
- Revises *land disposal restrictions* (LDR), minimum technological requirements (MTRs), and permitting associated with contaminated media land disposal

Third Issue of Interest: Other Regulatory Developments: *HWIR-Waste Rule*

- Proposed December 21, 1995 (60 FR 66344)
- Applies to listed hazardous wastes including:
 - *mixtures of listed wastes with solid waste*
 - residues *derived-from listed wastes*
- Uses “exit levels” set at risk-based concentrations to determine Subtitle C jurisdiction over waste
- Impacts LDR requirements
- HWIR-waste vs HWIR-media

Other Regulatory Developments: Revised Standards for Hazardous Waste Combustors

- Published April 19, 1996 (61 FR 17358)
- Proposed under both RCRA Subtitle C and Clean Air Act authority
- Establishes standards for broad spectrum of hazardous air pollutants (HAPs) and surrogates
- Applicable to hazardous waste incinerators
- Requires compliance with MACT standards
- *DOE concerns*

Emerging Issues Module Cross-Links

Module Page/Line	Cross-Link Language	Resource/Document
E-3/Notes, Line 3	“definition of solid waste”	RCRA Definitions of Solid and Hazardous Wastes Automated Guidance, (Windows Version 1.0), April 1997 [supersedes DOE/EH-273, August 1992], http://tis-nt.eh.doe.gov/oepa/programs/rcradef.html
E-5/Notes, Lines 10-11	“regulatory distinctions that currently exist”	Requirements for Recycling of Hazardous Waste, DOE/EH-231-001/0990, http://tis-nt.eh.doe.gov/oepa/guidance/rcra/recycle.pdf
E-6/Notes, Line 1	“Subpart S”	RCRA Corrective Action Permit Requirements and Modifications Under Proposed Subpart S Rule, DOE/EH-231-023/0793; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/subpts.pdf
E-6/Notes, Line 1	“were”	RCRA Corrective Action Interim Measures Under the Proposed Subpart S Rule, DOE/EH-231-024/0793; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/interim.pdf
E-6/Notes, Line 1	“initially”	RCRA Corrective Action Definitions Under Subpart F and Proposed Subpart S, DOE/EH-231-044/0394; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/definit.pdf
E-6/Notes, Line 1	“proposed”	Management of Corrective Action Wastes Pursuant to Proposed Subpart S, DOE/EH-231-029/0295, http://tis-nt.eh.doe.gov/oepa/guidance/rcra/ca_waste.pdf
E-6/Notes, Lines 3 & 4	“EPA’s most authoritative policy statement on RCRA corrective action”	Use of the Corrective Action Advance Notice of Proposed Rulemaking as Guidance, EH-413 memorandum dated 4/14/97, http://tis-nt.eh.doe.gov/oepa/guidance/rcra/anprmemo.pdf
E-6/Notes, Line 20	“substantial comment”	DOE Consolidated Comments - Resource Conservation and Recovery Act; “Departmental Response to "Subpart S" Corrective Action ANPRM”; 61 FR 19432, 7/30/96; http://tis-nt.eh.doe.gov/oepa/comments/rcra/ca-cmts.pdf

E-7/Notes, Line 1	“Land Disposal Program Flexibility Act”	OEPA Environmental Law Summary: Land Disposal Program Flexibility Act of 1996 (P.L. 104-119); http://tis-nt.eh.doe.gov/oepa/law_sum/ldpfa.htm
E-7/Notes, Line 3	“LDR requirements”	LDR Program Overview, DOE/EH-231/005-0293; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/ldr-over.pdf
E-7/Notes, Lines 13-14	“parity between the Superfund and RCRA corrective action programs”	A Comparison of the RCRA Corrective Action and CERCLA Remedial Action Processes, DOE/EH-0365; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/rcracomp.pdf
E-7/Notes, Line 21	“Soil Screening Guidance”	Environmental Protection Agency (EPA) Soil Screening Guidance; http://tis-nt.eh.doe.gov/oepa/guidance/cercla/soil.pdf
E-8/Slides, Lines 5-6	“post-closure care permits”	RCRA Permitting Guide for Hazardous & Radioactive Mixed Waste Management Facilities, Chap. 5, DOE/EH(RCRA)9705; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/permit_ch5.PDF
E-8/Notes, Line 1	“post-closure permits”	RCRA Post-Closure Permits, DOE/EH-231-021/0593 [NOT available on web]
E-8/Notes, Line 4	“alternatives to a RCRA post-closure care permit”	RCRA Corrective Action and Closure, DOE/EH-231-051/0295; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/closur.pdf

E-9/Slide, Line 2	“HWIR-Media Rule”	DOE Consolidated Comments - Resource Conservation and Recovery Act; “Consolidated Departmental Response to Proposed Hazardous Waste Identification Rule for Contaminated Media (HWIR-Media)”; http://tis-nt.eh.doe.gov/oepa/comments/rcra/hwir2.PDF
E-9/Slide, Line 9	“land disposal restrictions (LDR)”	LDR Program Overview, DOE/EH-231/005-0293; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/ldr-over.pdf
E-9/Slide, Line 10	“minimum technological requirements (MTRs)”	Liners and Leak Detection Systems for Hazardous Waste Land Disposal Units, RCRA Regulatory Bulletin, May 6, 1992; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/leak.pdf
E-9/Notes, Line 8	“LDR”	LDR Program Overview, DOE/EH-231/005-0293; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/ldr-over.pdf
E-9/Notes, Line 11	“liner and leachate collection”	Liners and Leak Detection Systems for Hazardous Waste Land Disposal Units, RCRA Regulatory Bulletin, May 6, 1992; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/leak.pdf
E-9/Notes, Line 18	“Subpart S Initiative”	DOE Consolidated Comments - Resource Conservation and Recovery Act; “Departmental Response to "Subpart S" Corrective Action ANPRM”; 61 FR 19432, 7/30/96; http://tis-nt.eh.doe.gov/oepa/comments/rcra/ca-cmts.pdf
E-9/Notes, Line 19-20	“corrective action management units (CAMUs)”	Corrective Action Management Units and Temporary Units, DOE/EH-231-043/0394; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/camu.pdf
E-9/Notes, Line 20	“CAMU”	CAMU/TU Final Rule Issued, RCRA Regulatory Bulletin, May 12, 1993; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/camu_tu.pdf

E-10/Slide, Line 3	“HWIR-Waste Rule”	DOE Consolidated Comments - Resource Conservation and Recovery Act; “Hazardous Waste Management System: Identification and Listing of Hazardous Waste: Hazardous Waste Identification Rule (HWIR)”; http://tis-nt.eh.doe.gov/oepa/comments/rcra/hwir-com.pdf
E-10/Slide, Line 6	“mixtures of listed waste with solid waste”	The Mixture Rule Under the Resource Conservation and Recovery Act, DOE/EH-231-005/0991; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/mixture.pdf
E-10/Slide, Line 7	“derived from listed waste”	The “Derived-from” Rule under the Resource Conservation and Recovery Act, DOE/EH-231-035/0693; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/derived.pdf
E-10/Notes, Lines 2-3	“waste mixed with listed waste”	The Mixture Rule Under the Resource Conservation and Recovery Act, DOE/EH-231-005/0991; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/mixture.pdf
E-10/Notes, Line 3	“derived-from listed waste”	The “Derived-from” Rule under the Resource Conservation and Recovery Act, DOE/EH-231-035/0693; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/derived.pdf
E-10/Notes, Line 10	“LDR”	LDR Program Overview, DOE/EH-231/005-0293; http://tis-nt.eh.doe.gov/oepa/guidance/rcra/ldr-over.pdf
E-10/Notes, Line 14	“HWIR-Media”	DOE Consolidated Comments - Resource Conservation and Recovery Act; “Consolidated Departmental Response to Proposed Hazardous Waste Identification Rule for Contaminated Media (HWIR-Media)”; http://tis-nt.eh.doe.gov/oepa/comments/rcra/hwir2.PDF
E-11/Slide, Line 11	“DOE Concerns”	Consolidated Departmental Response to Revised Standards for Hazardous Waste Combustors; Notice of Proposed Rulemaking (NPRM), 61 FR 17358, 11/7/96; http://tis-nt.eh.doe.gov/oepa/comments/rcra/cbs-rule.pdf
E-11/Notes, Line 19	“DOE Concerns”	Comments on Proposed Rule Establishing Air Emission Standards for Hazardous Waste Combustors, 61 FR 17358, 05/23/97; http://tis-nt.eh.doe.gov/oepa/comments/rcra/combust.pdf